

**AMENDMENTS TO THE CLAIMS:**

Please amend the claims as indicated below. This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A transmission method for transmitting data related to a first device through a network comprising:

storing connection information in a predetermined table, and  
transmitting the stored connection information over the network to a second device as command data in a predetermined format;

wherein the stored connection information has a hierarchical structure, including information about connections between internal units within the first device, and

wherein the stored connection information contains a unit identifier descriptor representing the first device ~~all data~~, a source descriptor representing a list of transmission sources, a destination descriptor representing a list of receivers, and a transformation descriptor representing a list of signal conversions.

2. (Previously Presented) The transmission method according to claim 1, wherein the connection information held in the table includes:

information related to a connection between an input unit or an output unit of the first device and an internal function processing unit of the first device; and information about which formats the first device can input or output.

3. (Previously Presented) The transmission method according to claim 2, wherein the information held in the table includes information related to transmitting the data over multiple connections at once.

4. (Previously Presented) The transmission method according to claim 2, wherein the connection information held in the table further includes information related to converting an input format into an output format by the first device.

5. (Previously Presented) The transmission method according to claim 2, wherein the information in the table indicates input or output units within the first device that are not connected to the network.

6. (Previously Presented) The transmission method according to claim 2, wherein information related to a present connection state in the first device is transmitted to the second device by transmission of the command data in a predetermined format.

7. (Previously Presented) The transmission method according to claim 6, wherein, when a present connection state of the first device changes, information related to the change is transmitted to the second device.

8. (Currently Amended) A transmission method for transmitting data related to a first device to a second device through a network, comprising:

the second device designating a unit within the first device for input;

the second device transmitting a command in a predetermined format that indicates which unit of the first device the second device has designated;

the first device transmitting data indicating the status of connections within the first device, including output units or internal function processing units corresponding to the designated input unit;

wherein the data has a hierarchical structure, including information about connections between internal units within the first device, and

wherein the data contains a unit identifier descriptor representing the first device ~~all data~~, a source descriptor representing a list of transmission sources, a destination descriptor representing a list of receivers, and a transformation descriptor representing a list of signal conversions.

9. (Previously Presented) The transmission method according to claim 8, wherein data for designating the input unit within the first device is transmitted to the second device.

10. (Currently Amended) A transmission method for transmitting data related to a first device connected to a second device through a network, comprising:

designating a unit within the first device for input by the second device;

the second device transmitting to the first device a command in a predetermined format that indicates which unit of the first device the second device has designated;

the first device transmitting data to the second device indicating a signal source corresponding to the designated unit within the first device;

wherein the data has a hierarchical structure, including information about connections between internal units within the first device, and

wherein the data contains a unit identifier descriptor representing the first device ~~all data~~, a source descriptor representing a list of transmission sources, a destination descriptor representing a list of receivers, and a transformation descriptor representing a list of signal conversions.

11. (Previously Presented) The transmission method according to claim 10, wherein when multiple signal sources exist, data related to multiple signal sources is transmitted.

12. (Previously Presented) The transmission method according to claim 10, wherein data representing that multiple signal sources exist is transmitted to the second device.

13. (Previously Presented) The transmission method according to claim 8, wherein similar data structures are used for both:

setting a connection between an input or output unit within the first device and a function processing unit within the first device; and

designating the input unit or output unit and function processing unit.

14. (Currently Amended) A transmission method for transmitting data related to a first device to a second device through a network, comprising:

transmitting from the first device data related to an output state of a video image from a specific output unit of the first device,

wherein the data has a hierarchical structure, including information about connections between internal units within the first device, and

wherein the data contains a unit identifier descriptor representing the first device ~~all data~~, a source descriptor representing a list of transmission sources, a destination descriptor representing a list of receivers, and a transformation descriptor representing a list of signal conversions.

15. (Previously Presented) The transmission method according to claim 14, wherein a flag representing that a specific video image is superposed on the video image is added to the data related to the output state of the video image.

16. (Previously Presented) The transmission method according to claim 15, wherein the specific video image represented by the flag is a video image of an on-screen display.

17. (Previously Presented) The transmission method according to claim 14, wherein a processing state of the video image is represented by the specific field of data related to the output state of the video image.

18. (Previously Presented) The transmission method according to claim 17, wherein a the processing state of the video image is represented by using a flag.

19. (Previously Presented) The transmission method according to claim 17, wherein the processing state is the state where predetermined data is being extracted from multiplexed video data.

20. (Previously Presented) The transmission method according to claim 17, wherein the processing state is the state where a video image is superposed on an on-screen data display.

21. (Previously Presented) The transmission according to claim 17, wherein the processing state is the state where the signal format of the video data is being converted.

22. (Previously Presented) The transmission method according to claim 17, wherein the processing state is the state where a special process is being performed on a video image.

23. (Previously Presented) The transmission method according to claim 22, wherein the state is the state where video images are mixed.

24. (Previously Presented) The transmission method according to claim 17, wherein a the processing state is the state where the output video image is set to the video image from the signal source.

25. (Currently Amended) A first transmission device which can be connected to a second device through a network, comprising

storage means for storing connection information in a table; and

transmission control means for transmitting part or all of the connection information stored by the storage means when a command of a predetermined format is received through the network,

wherein the connection information has a hierarchical structure, including information about connections between internal units within the first device, and

wherein the connection information contains a unit identifier descriptor representing the first device ~~all data~~, a source descriptor representing a list of transmission sources, a destination descriptor representing a list of receivers, and a transformation descriptor representing a list of signal conversions.

26. (Previously Presented) The transmission device according to claim 25, wherein the connection information held in the storage means includes:

information related to a connection between an input unit or an output unit within the first device and an internal function processing unit within the first device; and

information about which formats the first device can input or output.

27. (Previously Presented) The transmission device according to claim 26, wherein information held by the storage means includes information related to transmitting the data over multiple connections at once.

28. (Previously Presented) The transmission device according to claim 26, wherein connection information held in the storage means further include information related to converting an input format into an output format by the first device.

29. (Previously Presented) The transmission device according to claim 26, wherein the information in the storage means indicates input or output units within the first device that are not connected to the network.

30. (Previously Presented) The transmission device according to claim 26, wherein the transmission control means transmits information related to a present connection state in the first device to the second device by transmission of a command in a predetermined format.

31. (Previously Presented) The transmission device according to claim 30, wherein when a present connection state of the first device changes; the information transmitted by the transmission control means includes information related to the change in the present connection state of the first device.

32. (Currently Amended) A first transmission device which can be connected to a second device through a network, comprising:

transmission control means for transmitting connection data for a designated first device input, output, or internal function unit, wherein the connection data corresponds to the designated input or unit, and does not include connection data for every other input or internal function unit within the first device;

wherein the data has a hierarchical structure, including information about connections between internal units within the first device, and

wherein the data contains a unit identifier descriptor representing the first device ~~all data~~, a source descriptor representing a list of transmission sources, a destination descriptor representing a list of receivers, and a transformation descriptor representing a list of signal conversions.

33. (Previously Presented) The transmission device according to claim 32, wherein the transmission control means transmits data for designating an input unit within the first device.

34. (Currently Amended) A first transmission device which can be connected to a second device through a network connection, comprising:

receiving means for receiving data which specifies a signal source for an input to an output unit within the first device, or an input to an internal function processing unit within the first device;

transmission control means for transmitting the data for specifying the signal source;

wherein the data has a hierarchical structure, including information about connections between internal units within the first device, and

wherein the data contains a unit identifier descriptor representing the first device ~~all data~~, a source descriptor representing a list of transmission sources, a destination descriptor representing a list of receivers and a transformation descriptor representing a list of signal conversions.

35. (Previously Presented) The transmission device according to claim 34, wherein when multiple signal sources exist, the transmission control means transmit data related to multiple signal sources.



36. (Previously Presented) The transmission device according to claim 34, wherein when multiple signal sources exist, the transmission control means transmits data representing that there are multiple signal sources.

37. (Currently Amended) A first transmission device adapted to be connected to a second device through a network, comprising:

an output unit; and

transmission control means for transmitting data related to an output state of video data from the output unit;

wherein the data has a hierarchical structure, including information about connections between internal units within the first device, and

wherein the data contains a unit identifier descriptor representing the first device ~~all data~~, a source descriptor representing a list of transmission sources, a destination descriptor representing a list of receivers, and a transformation descriptor representing a list of signal conversions.

38. (Previously Presented) The transmission device according to claim 37, wherein the transmission control means adds a flag representing that a specific video data is superposed on a the video data.

39. (Previously Presented) The transmission device according to claim 38, wherein the specific video data represented by the flag added by the transmission control means is video data of an on-screen display.

40. (Previously Presented) The transmission device according to claim 37, wherein the transmission control means arranges data representing a processing state of a video image in a specific field of data related to the output state of the video image.

41. (Previously Presented) The transmission device according to claim 40, wherein the data arranged by the transmission control means is data representing the state where predetermined data is being extracted from multiplexed video data.

42. (Previously Presented) The transmission device according to claim 40, wherein the data arranged by the transmission control means is data representing the state where a video image is superposed on an on-screen data display.

43. (Previously Presented) The transmission device according to claim 40, wherein the data arranged by the transmission control means is data representing a the state ~~that a~~ where the signal format of the video data is being converted.

44. (Previously Presented) The transmission device according to claim 40, wherein the data arranged by the transmission control means is data representing the state where a special process is being performed on the video image.

45. (Previously Presented) The transmission device according to claim 44, wherein the process is a process where video images are mixed.

46. (Previously Presented) The transmission device according to claim 40, wherein the data arranged by the transmission control means is data representing that a the state where the output of the video image is the same as the video image of the signal source.

47. (Currently Amended) A transmission system in which a first device and a second device are connected to each other through a network, comprising:

storage means for storing connection information of the first device in a predetermined table; and

transmission control means for transmitting part or all of the connection information as a command in a predetermined format; and

connection determination means for determining the connection information in the first device on the basis of transmitted data;

wherein the connection information has a hierarchical structure, including information about connections between internal units within the first device, and

wherein the connection information contains a unit identifier descriptor representing the first device all data, a source descriptor representing a list of transmission sources, a destination descriptor representing a list of receivers, and a transformation descriptor representing a list of signal conversions.

48. (Previously Presented) The transmission system according to claim 47, wherein connection information held in the storage means of the first device includes:

information related to a connection between an input unit or an output unit of the first device and an internal function processing unit of the first device; and

information about which formats the first device can input or output, such that the second device can determine the connection information of the first device.

49. (Previously Presented) The transmission system according to claim 48, wherein the information held in the storage means of the first device includes information related to transmitting the data over multiple connections at once, such that devices receiving the information can determine the connection information of the first device.

50. (Previously Presented) The transmission system according to claim 48, wherein the connection information held in the storage means of the first device further

includes information related to converting an input format into an output format by the first device, such that the second device can determine the connection information of the first device.

51. (Previously Presented) The transmission system according claim 48, wherein the connection information held in the storage means indicates input or output units within the first device that are not connected to the network, such that the second device determines the connection information.

52. (Previously Presented) The transmission system according to claim 48, wherein the transmission control means of the first device transmits information related to a present connection state in the first device to the second device by transmitting command data in a predetermined format.

53. (Previously Presented) The transmission system according to claim 52, wherein when the present connection state in the first device changes, information transmitted by the transmission control means of the first device includes information related to the change in the present connection state, such that the second device can determine the change in the present connection state.

54. (Currently Amended) A transmission system in which a first device and a second device are connected to each other through a network, comprising:

transmission control means for transmitting connection data for a designated device input or internal function unit; and

connection determination means for determining the connection information in the first device,

wherein the connection data corresponds to the designated input or unit within the first device, and does not include connection data for every other device input or internal function unit within the first device;

wherein the connection information has a hierarchical structure, including information about connections between internal units within the first device, and

wherein the connection information contains a unit identifier descriptor representing the first device ~~all data~~, a source descriptor representing a list of transmission sources, a destination descriptor representing a list of receivers, and a transformation descriptor representing a list of signal conversions.

55. (Previously Presented) The transmission system according to claim 54, wherein the transmission control means of the first device transmits data for designating an input unit within the first device, and the connection determination means of the second device determines the state of the connection in the first device.

56. (Currently Amended) A transmission system in which a first device and a second device are connected to each other through a network, comprising:

receiving means for receiving data which specifies a signal source of an input to an output unit within the first device, or an input to an internal function processing unit within the first device;

transmission control means for transmitting the data for specifying the signal source; and

connection determination means for specifying the signal source of the output unit within the first device,

wherein the data has a hierarchical structure, including information about connections between internal units within the first device, and

wherein the data contains a unit identifier descriptor representing the first device ~~all data~~, a source descriptor representing a list of transmission sources, a destination descriptor representing a list of receivers, and a transformation descriptor representing a list of signal conversions.

57. (Previously Presented) The transmission system according to claim 56, wherein when multiple signal sources exist, the transmission control means of the first device transmits data related to the multiple signal sources, and the connection determination means of the second device determines the multiple signal sources.

58. (Previously Presented) The transmission system according to claim 56, wherein when multiple signal sources exist, the transmission control means of the first device transmits data representing that there are multiple signal sources, and the connection determination means of the second device determines that there are multiple signal sources.

59. (Currently Amended) A transmission system in which a first device and a second device are connected to each other through a network, comprising:

transmission control means for transmitting data related to an output state of video data from an output unit within the first device; and

state determination means for determining the output state on the basis of data transmitted from the first device,

wherein the data has a hierarchical structure, including information about connections between internal units within the first device, and

wherein the data contains a unit identifier descriptor representing the first device  
~~all data~~, a source descriptor representing a list of transmission sources, a destination  
descriptor representing a list of receivers, and a transformation descriptor representing  
a list of signal conversions.

60. (Previously Presented) The transmission system according claim 59, wherein  
the transmission control means of the first device adds a flag representing that a  
specific video data is superposed on video data, and

the state determination means of the second device determines on the basis of  
the flag that the specific video data is superposed on the video data.

61. (Previously Presented) The transmission system according to claim 60,  
wherein the specific video data represented by the flag is video data of an on-screen  
display, and the state determination means of the second device determines that the  
specific video data is the video data of the on-screen display on the basis of the flag.

62. (Previously Presented) The transmission system according to claim 59,  
wherein the transmission control means of the first device arranges data representing a  
processing state of a video image in a specific field of data related to the output state of  
a video image, and the state determination means of the second device determines the  
processing state of the video image.

63. (Previously Presented) The transmission system according to claim 62,  
wherein the data arranged by the transmission control means of the first device is data  
representing the state where predetermined data is extracted from multiplexed video  
data, and the state determination means of the second device determines that the first

device is in a state where it is extracting predetermined data from multiplexed video data.

64. (Previously Presented) The transmission system according to claim 62, wherein the data arranged by the transmission control means of the first device is data representing the state of an on-screen display for displaying a superposed video image, and the state determination means of the second device determines the state of the on-screen display.

65. (Previously Presented) The transmission system according to claim 62, wherein, the data arranged by the transmission control means of the first device is data representing the state where the signal format of the video data is being converted, and the state determination means of the second device determines that the first device is in a state where it is converting the signal format of the video data.

66. (Previously Presented) The transmission system according to claim 62, wherein the data arranged by the transmission control means of the first device is data representing the state where a special process is being performed on a video image, and the state determination means of the second device determines that the first device is in a state where it is performing a special process on the video image.

67. (Previously Presented) The transmission system according to claim 66, wherein the special process is a process where video images are mixed, and the state determination means of the second device determines that the first device is in the state where the video images are being mixed.

68. (Previously Presented) The transmission system according to claim 62, wherein the data arranged by the transmission control means of the first device is data



representing that the state where the output of the video image is the same as the video image of the signal source, and the state determination means of the second device determines that the output of the video image from the first device is the same as the video image of the signal source.